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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,839	07/08/2002	Andreas Klingenberg	077251-0104	6187

22428 7590 10/20/2004

FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

NGUYEN, NGOC YEN M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,839

Applicant(s)

KLINGENGERG

Examiner

Ngoc-Yen M. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treat (3,290,158) in view of Miki (4,806,332).

Treat '158 discloses a method of adding conditioners and parting agents to hygroscopic materials which have a tendency to cake and solidify upon exposure to moisture (note column 10-13).

The conditioners which can be used are the well known insoluble commercial conditioners which can be utilized in an aqueous slurry. These are the siliceous conditioners such as finely divided metal silicates, pyrogenic silica, among others (note column 1, lines 62-71). In the process, by adding a high solids aqueous slurry of conditioner, generally from about 1% to 60% solids content to the material to be conditioned, a satisfactory level of conditioning effectiveness is obtained with no undesirable side effects such as dusting, shotballing or lumps. The product is free-flowing (note paragraph bridging column 1-2). The amount of the conditioner in the final product is from 0.1 to 5%, based upon the weight of dry product. Thus, the amount of the conditioner in the final product is slightly less than 0.1 to 5% when based upon the total weight of the dry product and the conditioner. This range overlaps the claimed

range. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549.

In Treat '158, sodium chloride is disclosed as an example, however, Treat '158 does disclose that the process is applicable to hygroscopic powdered or granular materials which are derived in wet or moist form and require drying prior to final processing. Without intending to limit the scope of his invention, Treat '158 described it as applied to common salt. It is to be understood that the process can be applied to other products which exhibit hygroscopicity, caking and poor flow properties unless conditioned (note column 1, lines 52-61).

Treat '158 does not specifically disclose treating an alkali metal fluoride or an alkaline earth metal fluoride with the conditioner.

Miki '332 discloses the desire of preventing anhydrous potassium fluoride from solidification, i.e., from caking (note title and claim 1). Mike '332 teaches that anhydrous potassium fluoride is composed of a crystal structure of high hygroscopic property, and absorbs moisture to form $\text{KF} \cdot 2\text{H}_2\text{O}$ or $\text{KF} \cdot 4\text{H}_2\text{O}$, thus, it is necessary to pay attention so as to prevent the anhydrous potassium fluoride from absorbing moisture (note column 1, lines 21-30).

Miki '332 discloses that the potassium fluoride can be formed by spraying drying an aqueous solution of potassium fluoride at 450°C with the output temperature at $100\text{-}150^\circ\text{C}$ (note column 3, Example 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made use the conditioner, such as pyrogenic silica as disclosed in Treat '158 to prevent caking for the potassium fluoride as suggested by Miki '332 because potassium fluoride is known as hygroscopic material and the conditioner of Treat '158 is suitable to treat hygroscopic material to prevent it from caking and poor flow properties.

Applicant's arguments filed May 10, 2004 have been fully considered but they are not persuasive.

Applicants argue that Miki includes statements that would lead one skilled in the art away from the modification proposed in the above rejection, "there is a difficulty of how to perfectly adhere additive fine particles to the anhydrous potassium fluoride".

Granted that Miki teaches that it is difficult to perfectly adhere additive fine particles to the anhydrous potassium fluoride, however, this is impossible. Treat '158 fairly teaches a process to treat a hygroscopic powder with pyrogenic silica (note the above rejection). If even if some the pyrogenic silica in Treat '158 did not adhere to the hygroscopic powder, such as anhydrous potassium fluoride, the "loose" and/or adhered silica still forms a mixture with the potassium fluoride. It should be noted that Applicants' claims only require a mixture of potassium fluoride and pyrogenic silicic acid, the silicic acid is not required to be adhered or separated from the potassium fluoride. It should also be noted that the mixture as required in Applicants' claims is not required to have free-flowing or any other properties.

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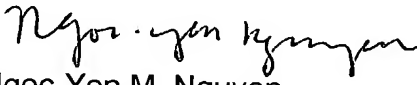
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc-Yen M. Nguyen whose telephone number is (571) 272-1356. The examiner is currently on Part time schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-1700.


Ngoc-Yen M. Nguyen
Primary Examiner
Art Unit 1754

nmn
10/18/04